

H11346

NOAA FORM 76-35A U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY DESCRIPTIVE REPORT	
<i>Type of Survey:</i>	Navigable Area
<i>Registry Number:</i>	H11346
LOCALITY	
<i>State:</i>	Massachusetts
<i>General Locality:</i>	South Coast of Massachusetts
<i>Sub-locality:</i>	Edgartown Harbor
2004	
CHIEF OF PARTY CDR Emily B. Christman, NOAA	
LIBRARY & ARCHIVES DATE	

NOAA FORM 77-28 (11-72)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION		REGISTRY NUMBER: H11346	
HYDROGRAPHIC TITLE SHEET					
INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.					
State:	Massachusetts				
General Locality:	South Coast of Massachusetts				
Sub-Locality:	Edgartown Harbor				
Scale:	1:10,000	Date of Survey:	8/14/04 to 9/27/04		
Instructions Dated:	06/17/04	Project Number:	S-B904-TJ-04		
Vessel:	NOAA Ship THOMAS JEFFERSON, S-222				
Chief of Party:	CDR Emily B. Christman, NOAA				
Surveyed by:	THOMAS JEFFERSON Personnel				
Soundings by:	Reson SeaBat 8101 Multibeam Echosounder				
	Reson SeaBat 8125 Multibeam Echosounder				
	Odom Vertical Beam Echosounder				
Graphic record scaled by:	N/A				
Graphic record checked by:	N/A				
Protracted by:	N/A	Automated Plot:	N/A <i>Hewlett Packard Design Jet 2500 CP (office)</i>		
Verification by:	Atlantic Hydrographic Branch Personnel				
Soundings in:	<i>Feet</i> Meters at MLLW				
Remarks:	<i>Red, bold, italic notes in descriptive report were made during office processing.</i>				
	<i>1) All Times are UTC.</i> <i>2) This is a Navigable Area Hydrographic Survey.</i> <i>3) Projection is UTM Zone 19.</i>				

TABLE OF CONTENTS

A. AREA SURVEYED 1

B. DATA ACQUISITION AND PROCESSING 3

 EQUIPMENT 3

 QUALITY CONTROL 3

 Side Scan Sonar Quality Control 3

 Multibeam Echosounder Quality Control 3

 Crosslines 4

 Junctions 5

 CORRECTIONS TO ECHO SOUNDING 5

C. VERTICAL AND HORIZONTAL CONTROL 5

 VERTICAL CONTROL 5

 HORIZONTAL CONTROL 5

D. RESULTS AND RECOMMENDATIONS 6

 CHART COMPARISON 6

 General Agreement with Charted Soundings, Features, and Notes 6

 ADDITIONAL RESULTS 7

 Aids to Navigation and Other Detached Positions 7

 Bridges and Overhead Cables 7

 Ferry Routes 7

 Submarine Cables and Pipelines 7

 Tidal Conditions 7

E. APPROVAL SHEET 8

APPENDICES

APPENDIX I – ITEM INVESTIGATION REPORTS*

APPENDIX II – LIST OF GEOGRAPHIC NAMES*

APPENDIX III – PROGRESS SKETCH*

APPENDIX IV – TIDE AND WATER LEVELS*

APPENDIX V – SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCES*

**Data Filed with original field records.*

DESCRIPTIVE REPORT

to accompany
HYDROGRAPHIC SURVEY H11346

Scale of Survey: 1:10,000

Year of Survey: 2004

NOAA Ship THOMAS JEFFERSON
CDR Emily B. Christman, Commanding

A. AREA SURVEYED

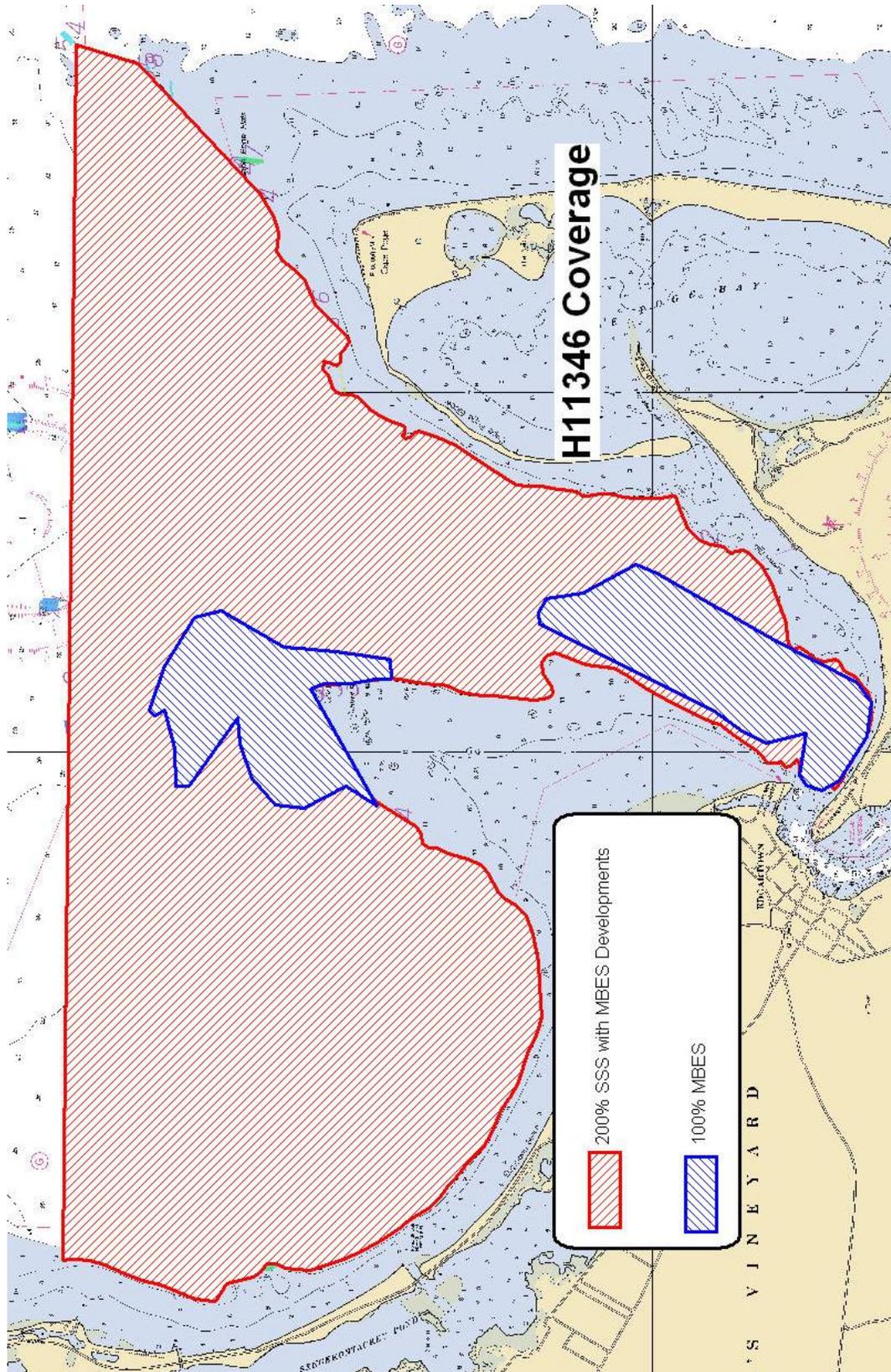
This hydrographic survey was conducted in accordance with Hydrographic Survey Letter Instructions* for project S-B904-TJ-04, South Coast of Massachusetts, Edgartown Harbor. The original instructions are dated June 17, 2004.

This Descriptive Report pertains to sheet "E" of project S-B904-TJ-04. The assigned registry number for this sheet is H11346, as prescribed in the Letter Instructions.

This project responds to requests from the U.S. Coast Guard, as Edgartown Harbor is an important destination for ferries both inter-island and those bound to and from the Massachusetts mainland. A special request was made by the ferry service to acquire 100% MBES in the immediate vicinity north and west of Allen Rock. 100% MBES data was also acquired on the approach to Edgartown Inner Harbor between the R "6" and R N "8" buoys.

For complete survey limits, see the chartlet on the following page.

**Data filed with original field records.*



B. DATA ACQUISITION AND PROCESSING

EQUIPMENT *See also the Evaluation Report.*

Data were acquired by NOAA Ship THOMAS JEFFERSON's Launch 1005 and Launch 1014. Both launches are NOAA's standard 8.5-meter aluminum Jensen vessel with a typical 0.5 meter mean draft.

Launch 1005 acquired multibeam echosounder (MBES) data using a Reson SeaBat 8101 multibeam system. All positioning and attitude were determined with a TSS POS/MV 320 (version 3) DGPS-aided inertial navigation system.

Launch 1014 acquired MBES hydrography with a Reson SeaBat 8125 multibeam system. For continuous refraction correctors, a Digibar Pro was used for the surface sound velocity. All positioning and attitude were determined with a TSS POS/MV 320 (version 3) DGPS-aided inertial navigation system.

Side Scan Sonar data was acquired by both launches using a hull-mounted Klein 5000 side scan sonar.

No unusual vessel configurations or problems were encountered. Refer to the Fall Data Acquisition and Processing Report (DAPR*) for detailed equipment, vessel configuration and setting information.

**Data filed with original field records.*

QUALITY CONTROL

Side Scan Sonar Quality Control

A towfish altitude of eight to twenty percent of the range scale was maintained during data acquisition.

Daily confidence checks were made by observing the outer ranges of the side scan sonar images. A good check consisted of distinguishing contacts or sand waves across the entire range of the side scan trace. No unusual problems were encountered.

Concur.

Multibeam Echosounder Quality Control

There were no faults with the MBES system which affected data integrity. Daily confidence checks examining the internal consistency of the MBES were made by comparing both overlapping lines and crosslines. *Concur*

Significant amounts of seaweed are present West and North of Allen Rock, within the 12 foot contour. These marine growth affected MBES data quality. Soundings in this area may be shoaler than actual depths due to the marine growth. These data outliers were cleaned as much as possible manually to mitigate these artificially shoaler depths. *Concur.*

Refer to this project's DAPR* for detailed discussion of MBES system calibrations, data acquisition, and data processing. **Data filed with original field records.*

Crosslines

Twenty-five nm of crosslines (7.56% of the 329.9 nm of mainscheme MBES and VBES data) were acquired. No traditional crossline comparison was performed on the multibeam data because quality control procedures have been incorporated into the depth and uncertainty models produced by CARIS 5.4. *Concur.*

BASE Surface and Total Propagated Error

CARIS HIPS BASE (Bathymetry with Associated Statistical Error) surfaces for this survey were created at 0.5m-resolution for depths less than 15 meters.

1. Density: 200% SSS with MBES developments were acquired. During acquisition, daily coverage BASE grids were created and holiday line plans derived from these grids. This survey was designed to meet specs and deliverables. *Concur.*
2. Uncertainty: An examination of the uncertainty grid was performed and the high uncertainty areas were examined in CARIS subset editor.
3. Standard Deviation: Areas of high standard deviation were investigated and resolved. High standard deviation areas were investigated in CARIS subset editor, and true fliers were examined and rejected. High standard deviation areas caused by natural geologic features or submerged anthropogenic objects were also investigated by the Hydrographer. *Concur.*

Five coverage BASE Surface were created at a resolution of 0.5m for this project. A combined surface was created at a resolution of 3m to facilitate easier insertion into Pydro:

NAME	PURPOSE	RESOLUTION (M)
H11346_middle_05m_Final	Coverage	0.5
H11346_northeast_Final	Coverage	0.5
H11346_south_05m_Final	Coverage	0.5
H11346_west_Final	Coverage	0.5
H11346_north_Final	Coverage	0.5
B904_TJ_04_H11346_Combined	Combined	3

Junctions

There were no contemporary surveys with which to junction. *Concur.*

CORRECTIONS TO ECHO SOUNDING

All methods or instruments used were as described in the project DAPR*. A table detailing all sound velocity casts is located in Separate III*.

**Filed with original field records.*

C. VERTICAL AND HORIZONTAL CONTROL

VERTICAL CONTROL

The tidal datum for this project is Mean Lower Low Water (MLLW). Preliminary zones are based on the gauge at Nantucket, MA (844-9130). A tertiary tide gauge was installed at Edgartown (844-8558) for this project.

The preliminary zones used for this survey are as follows:

Table 1: Preliminary Tide Zones & Correctors

Zone Name	Corrector (min)	Ratio	Reference
SCM116	-36	x0.61	844-9130
SCM117	-36	x0.61	844-9130
SCM 122	-30	x0.69	844-9130
SCM122A	-30	x0.64	844-9130
SCM123	-24	x0.69	844-9130
SCM130	-24	x0.76	844-9130

A Request for Approved Tides letter was sent to N/OPS1 on October 5, 2004 (See Appendix IV*).

Approved tides using final tide zoning were applied during office processing.

** Filed with original field records.*

HORIZONTAL CONTROL

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using UTM zone 19. *Concur.*

Horizontal position was determined using the Global Positioning System (GPS) corrected by U.S. Coast Guard differential GPS (DGPS) beacon stations. The primary DGPS beacon used for this survey was Acushnet, MA and the secondary was

Moriches, NY. No horizontal control stations were established for this survey. *See also Evaluation Report.*

D. RESULTS AND RECOMMENDATIONS *See also the Evaluation Report.*

CHART COMPARISON

There are 3 charts affected by this survey:

Table 2: Affected Charts

Number	Version	Edition Date	Scale
13233	16 th Ed.	04/14/01	1:40,000
13237	39 th Ed.	05/01/03	1:80,000
13238	14 th Ed.	09/27/97	1:20,000

General Agreement with Charted Soundings, Features, and Notes

Sounding data agreed well with charted depths. Discrete differences are addressed in the “Dangers to Navigation,” “Significant Uncharted Features” and “Significant Charted Features” sections in Appendix I. *Concur.*

Four charted rocks were within the limits of this survey. Two rocks were found in their charted positions. See Appendix I. *Concur.*

Dangers to Navigation

~~One~~ *Three* DtoN items ~~was~~ *were* found on this survey. The item (*DtoN report*) was submitted by the Hydrographer to MCD on November 1, 2004. (See Appendix I) *Concur. One DtoN was discovered during office processing and submitted to MCD on 1/13/2006. A copy is attached to the end of the Evaluation and Analysis Report.*

AWOIS Items and Significant Contacts

There were 15 Significant Uncharted Features and 2 Significant Charted Features. No AWOIS items were within survey limits. These features are discussed in detail in Appendix I. *Concur.*

ADDITIONAL RESULTS

Aids to Navigation and Other Detached Positions

Six buoys were on this survey and detached positions were acquired. All six buoys fell within 50 meters of charted position. *Concur. Defer final charting disposition of aids to navigation to Marine Chart Division (MCD), Nautical Data Branch (NDB), Source Information Unit (SIU).*

Bridges and Overhead Cables

There are no bridges or overhead cables on this survey. *Concur.*

Ferry Routes

There is a seasonal ferry that travels between Edgartown, MA and Falmouth, MA. The Hydrographer has no recommendations for charting ferry route. *Concur. Defer final charting disposition of ferry routes to Marine Chart Division (MCD), Nautical Data Branch (NDB), Source Information Unit (SIU).*

Submarine Cables and Pipelines

There are no submarine cables or pipelines on this survey. *Concur.*

Tidal Conditions

No unusual tidal conditions were encountered. *Concur.*

E. APPROVAL SHEET

S-B904-TJ-04
South Coast of Massachusetts
Edgartown Harbor
Survey Registry No. H11346

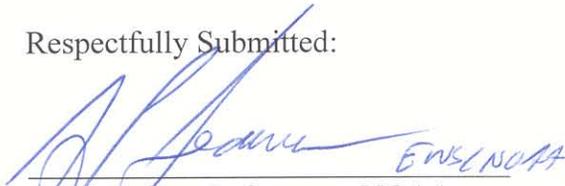
Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy. All bathymetry models, this Descriptive Report, and all accompanying records and data are approved.

This survey is adequate to supersede all prior surveys in common areas and for application to the relevant NOS nautical charts.

Also submitted in association with this descriptive report has been a series of reports and data:

- SEPARATES TO ACCOMPANY PROJECT S-B904-TJ-04, SHEET E, H11346
- DATA ACQUISITION AND PROCESSING REPORT <PENDING>
- HORIZONTAL AND VERTICAL CONTROL REPORT <PENDING>

Respectfully Submitted:


ENS Andrew P. Seaman, NOAA
Junior Officer/Hydrographer

Approved and Forwarded:


LT Marc S. Moser, NOAA
Field Operations Officer


CDR Emily B. Christman, NOAA
Commanding Officer

APPENDIX I**ITEM INVESTIGATION REPORTS**

The following are item investigation reports detailing three groups of features:

- 1) Field submitted DTON
- 2) **Significant Charted Features**
- 3) Significant Uncharted Features
- 4) Office Identified Features
- 5) Detached Positions

H11346 Features Report

Registry Number: H11346
State: Massachusetts
Locality: South Coast of Massachusetts
Sub-locality: Edgartown Harbor
Project Number: S-B904-TJ-04
Survey Dates: 08/14/2004 - 09/27/2004

Charts Affected

Number	Version	Date	Scale
13238	14th Ed.	09/27/1997	1:20000
13233	16th Ed.	04/14/2001	1:40000
13237	39th Ed.	05/01/2003	1:80000
12300	44th Ed.	07/01/2004	1:400000
13200	33rd Ed.	01/19/2002	1:400000
13009	30th Ed.	08/01/2002	1:500000
13006	31st Ed.	06/01/2003	1:675000
5161	13th Ed.	10/01/2003	1:1058400
13003	47th Ed.	06/01/2003	1:1200000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Field DtoN #1	Rock	4.82 m	041° 26' 01.628" N	70° 29' 32.216" W	---
1.2	Field DtoN #2	Rock	4.83 m	041° 25' 57.163" N	70° 29' 24.628" W	---
1.3	Field DtoN #3	Rock	4.80 m	041° 25' 55.918" N	70° 29' 19.224" W	---
2.1	CHRTD 8-FT Rock	Rock	3.02 m	041° 25' 55.294" N	70° 29' 40.299" W	---
2.2	CHRTD 10-FT Rock	Rock	3.11 m	041° 25' 49.856" N	70° 29' 38.993" W	---
2.3	CHRTD 11-FT Rock	Sounding	6.56 m	041° 26' 08.789" N	70° 29' 28.535" W	---
2.4	CHRTD 11-FT Rock	Sounding	7.41 m	041° 26' 14.000" N	70° 29' 24.521" W	---
3.1	UNCHARTED 12-FT Rk	Shoal	3.82 m	041° 25' 24.840" N	70° 27' 40.575" W	---
3.2	UNCHARTED 11-FT Rk	Rock	3.53 m	041° 25' 16.525" N	70° 29' 32.928" W	---
3.3	UNCHARTED 9-FT Rk	Rock	2.88 m	041° 25' 46.423" N	70° 29' 43.349" W	---

3.4	UNCHARTED 11-FT Rk	Rock	3.28 m	041° 25' 04.516" N	70° 30' 24.055" W	---
3.5	UNCHARTED 18-FT Rk	Rock	5.47 m	041° 26' 29.964" N	70° 26' 04.204" W	---
3.6	UNCHARTED 19-FT Rk	Rock	5.96 m	041° 26' 09.425" N	70° 29' 58.410" W	---
3.7	UNCHARTED 17-FT Rk	Rock	5.39 m	041° 25' 59.483" N	70° 30' 01.715" W	---
3.8	UNCHARTED 15-FT Rk	Rock	4.57 m	041° 26' 01.887" N	70° 29' 44.750" W	---
3.9	UNCHARTED 22-FT Rk	Rock	6.63 m	041° 26' 16.328" N	70° 29' 13.801" W	---
3.10	UNCHARTED 32-FT Wreck	Wreck	9.71 m	041° 23' 44.442" N	70° 29' 12.664" W	---
3.11	UNCHARTED 30-Ft Rk	Rock	9.23 m	041° 25' 49.940" N	70° 27' 47.704" W	---
3.12	UNCHARTED 36-FT Rk	Rock	11.14 m	041° 25' 54.602" N	70° 27' 54.107" W	---
4.1	OIF: 23-ft Rk	Rock	7.06 m	041° 24' 58.111" N	70° 32' 24.411" W	---
4.2	OIF: 14-ft RK	Rock	4.30 m	041° 25' 57.731" N	70° 32' 52.394" W	---
4.3	OIF: 16-ft Rk	Rock	5.06 m	041° 26' 06.696" N	70° 32' 42.366" W	---
4.4	OIF: 17-ft RK	Rock	5.12 m	041° 26' 09.745" N	70° 32' 40.660" W	---
4.5	OIF:22-ft Rk	Rock	6.71 m	041° 26' 19.501" N	70° 31' 49.349" W	---
4.6	OIF: 28-ft RK	Rock	8.51 m	041° 26' 22.350" N	70° 31' 23.819" W	---
4.7	OIF: 11-ft RK	Rock	3.44 m	041° 25' 41.065" N	70° 26' 58.899" W	---
4.8	OIF: 14-ft Rk	Rock	4.36 m	041° 25' 28.927" N	70° 27' 45.455" W	---
4.9	OIF: 12-ft Rk	Rock	3.68 m	041° 25' 11.176" N	70° 29' 32.105" W	---
4.10	OIF:12-ft Rk	Rock	3.63 m	041° 25' 22.130" N	70° 29' 34.716" W	---
4.11	OIF: 12 -ft RK	Rock	3.85 m	041° 25' 25.489" N	70° 29' 35.958" W	---
4.12	OIF: 12-ft RK	Rock	3.59 m	041° 25' 16.799" N	70° 29' 36.363" W	---
4.13	OIF: 21-ft Rk	Rock	6.58 m	041° 25' 04.786" N	70° 30' 41.585" W	---
4.14	OIF: 19-ft Rk	Rock	6.02 m	041° 26' 09.742" N	70° 29' 49.503" W	---
4.15	OIF: 18-RK	Rock	5.66 m	041° 26' 04.261" N	70° 29' 46.374" W	---
4.16	OIF: 8-ft RK 793/240	Rock	2.63 m	041° 25' 55.920" N	70° 29' 47.377" W	---
4.17	Charted 23-ft Rk 194/83	Rock	7.21 m	041° 26' 31.620" N	70° 29' 13.930" W	---
4.18	OIF: 18-ft Rk 22/80	Rock	5.71 m	041° 26' 04.998" N	70° 29' 24.066" W	---
4.19	OIF: 15-ft RK 104/1	Rock	4.56 m	041° 25' 55.071" N	70° 29' 27.842" W	---
4.20	16-ft Rk 482/96	Rock	5.04 m	041° 25' 54.411" N	70° 29' 23.472" W	---
4.21	OIF: 12-ft Rk 1253/60	Rock	3.66 m	041° 25' 54.393" N	70° 29' 32.780" W	---
4.22	OIF: 19-ft RK 868/17	Rock	5.91 m	041° 26' 08.212" N	70° 29' 20.547" W	---
4.23	OIF: 19-ft Rk 719/5	Rock	5.77 m	041° 26' 09.681" N	70° 29' 18.183" W	---
4.24	OIF: 20-ft Rk 122/9	Rock	6.20 m	041° 25' 39.357" N	70° 27' 38.010" W	---
4.25	OIF: 9-ft Rk 941/235	Rock	2.84 m	041° 25' 42.607" N	70° 29' 45.544" W	---
4.26	OIF: 18-ft Rk 192/66	Rock	5.51 m	041° 25' 38.182" N	70° 27' 31.622" W	---
4.27	OIF: 12 Rk 658/26	Rock	3.79 m	041° 25' 20.884" N	70° 29' 36.731" W	---

4.28	OIF: 16-ft Rk 135/148	Rock	5.02 m	041° 25' 57.087" N	70° 29' 55.688" W	---
4.29	OIF: 10-ft Rk 911/155	Rock	3.26 m	041° 25' 45.831" N	70° 29' 33.052" W	---
4.30	OIF: 22-ft Rk 100/12	Rock	6.72 m	041° 26' 11.540" N	70° 29' 06.648" W	---
4.31	OIF: 21-ft Rk 227/32	Rock	6.40 m	041° 25' 48.529" N	70° 29' 17.121" W	---
4.32	OIF: 13-ft Rk 2248/62	Rock	3.96 m	041° 25' 58.527" N	70° 29' 37.362" W	---
4.33	OIF: 11-ft Rk 310/25	Rock	3.47 m	041° 25' 42.962" N	70° 29' 33.046" W	---
4.34	OIF: 18-Rk 244/83	Rock	5.62 m	041° 26' 07.223" N	70° 29' 27.854" W	---
4.35	OIF: 11-ft Rk 1649/15	Rock	3.52 m	041° 25' 49.267" N	70° 29' 31.156" W	---
4.36	OIF: 19-ft Rk 233/92	Rock	6.02 m	041° 26' 11.242" N	70° 30' 06.474" W	---
4.37	OIF: 18-ft Rk 1047/100	Rock	5.52 m	041° 25' 51.549" N	70° 29' 18.031" W	---
4.38	OIF: 12-ft Rk 50/165	Rock	3.77 m	041° 25' 18.377" N	70° 30' 14.707" W	---
4.39	OIF: 11-ft SND (Shoal) 358/35	Shoal	3.49 m	041° 25' 31.608" N	70° 29' 36.975" W	---
4.40	OIF: 10-ft Rk 370/126	Rock	3.16 m	041° 25' 32.427" N	70° 30' 08.316" W	---
4.41	OIF: 17-ft Rk 70/13	Rock	5.15 m	041° 25' 59.426" N	70° 29' 55.867" W	---
4.42	OIF: 19-ft Rk 457/6	Rock	5.80 m	041° 26' 08.052" N	70° 29' 42.971" W	---
4.43	OIF: 10-ft Rk 1013/10	Rock	2.98 m	041° 25' 28.457" N	70° 29' 48.856" W	---
4.44	OIF: 19-ft Rk 274/85	Rock	5.77 m	041° 25' 45.880" N	70° 29' 21.956" W	---

1 - DtoN's

1.1) Profile/Beam - 963/94 from h11346 / 1005_mb / 2004-270 / 130_1702

DANGER TO NAVIGATION

Survey Summary

Survey Position: 041° 26' 01.628" N, 70° 29' 32.216" W
Least Depth: 4.82 m
Timestamp: 2004-270.17:04:05.456 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 130_1702
Profile/Beam: 963/94
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/130_1702	963/94	0.00	000.0	Primary
h11346/1005_100/2004-229/140_1918	0006	4.44	203.5	Secondary
h11346/1014_200/2004-231/240_1820	0020	6.28	210.9	Secondary
h11346/1014_200/2004-231/241_1831	0005	6.28	210.9	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

16ft (13238_1, 13233_1, 13237_1)

2 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

4.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.818 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Field DtoN #1 - Concur with clarification. Upon office review this feature was identified as a rock. Chart a dangerous rock with a least depth of 16-ft at the current survey location in Latitude 41°26'01.628"N, Longitude 070°29'32.216"W.

1.2) Profile/Beam - 2965/33 from h11346 / 1014_mb / 2004-227 / 306_1308

DANGER TO NAVIGATION

Survey Summary

Survey Position: 041° 25' 57.163" N, 70° 29' 24.628" W
Least Depth: 4.83 m
Timestamp: 2004-227.13:27:25.157 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 306_1308
Profile/Beam: 2965/33
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/306_1308	2965/33	0.00	000.0	Primary
h11346/1005_100/2004-229/142_2124	0008	4.23	020.8	Secondary
h11346/1014_200/2004-231/243_1838	0007	4.74	043.0	Secondary
h11346/1014_200/2004-231/243_1838	0028	4.74	043.0	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

16ft (13238_1, 13233_1, 13237_1)

2 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

4.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.828 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Field DtoN #2 - Concur with clarification. Upon office review this charted 16 sounding was identified as a rock. Chart a dangerous rock with a least depth of 16 feet at the survey location in Latitude 41°25'57.163"N, Longitude 070°29'24.628".

1.3) Profile/Beam - 138/8 from h11346 / 1005_mb / 2004-270 / 132_1708

DANGER TO NAVIGATION

Survey Summary

Survey Position: 041° 25' 55.918" N, 70° 29' 19.224" W
Least Depth: 4.80 m
Timestamp: 2004-270.17:08:19.084 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 132_1708
Profile/Beam: 138/8
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/132_1708	138/8	0.00	000.0	Primary
h11346/1005_100/2004-230/143_1616	0006	3.18	199.7	Secondary
h11346/1005_100/2004-229/143_2140	0003	3.83	153.1	Secondary
h11346/1014_200/2004-231/244_1847	0005	4.47	205.9	Secondary
h11346/1014_200/2004-231/244_1847	0013	4.47	205.9	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

15ft (13238_1, 13233_1, 13237_1)

2 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

4.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 4.799 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart dangerous 15-ft (15.744-ft) Rk at present survey location in Latitude 41°25'55.918"N, Longitude 070°29'19.224"W.

2 - Charted Features

2.1) Profile/Beam - 808/80 from h11346 / 1005_mb / 2004-243 / 260_1410

Survey Summary

Survey Position: 041° 25' 55.294" N, 70° 29' 40.299" W
Least Depth: 3.02 m
Timestamp: 2004-243.14:11:18.224 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 260_1410
Profile/Beam: 808/80
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES were acquired over the area and a rock was found with a least depth listed above

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/260_1410	808/80	0.00	000.0	Primary

Hydrographer Recommendations

Retain as charted.

Cartographically-Rounded Depth (Affected Charts):

10ft (13238_1, 13233_1, 13237_1)

1 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.021 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Do not concur. Revise the charted 8-ft Rk to a 10-ft Rk located in Latitude 41°25'55.294"N, Longitude 070°29'40.299"W.

2.2) Profile/Beam - 529/189 from h11346 / 1014_mb / 2004-227 / 463_1803

Survey Summary

Survey Position: 041° 25' 49.856" N, 70° 29' 38.993" W
Least Depth: 3.11 m
Timestamp: 2004-227.18:05:01.046 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 463_1803
Profile/Beam: 529/189
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a rock was found with a least depth listed above.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/463_1803	529/189	0.00	000.0	Primary

Hydrographer Recommendations

Retain as charted.

Cartographically-Rounded Depth (Affected Charts):

10ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.1m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.105 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur. Retain as charted.

2.3) Profile/Beam - 165/167 from h11346 / 1014_mb / 2004-227 / 495_1906

Survey Summary

Survey Position: 041° 26' 08.789" N, 70° 29' 28.535" W
Least Depth: 6.56 m
Timestamp: 2004-227.19:07:15.332 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 495_1906
Profile/Beam: 165/167
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over this area. No depth shoaler than the depth listed above was found, however, a rock with a least depth of 18-ft was found 50 meters SSW of this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/495_1906	165/167	0.00	000.0	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

21ft (13238_1, 13233_1, 13237_1)

3 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.557 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Current survey depth is 21.5 ft. Delete the charted 11 Rk in Latitude 41°26'08"N, Longitude 070°9'28"W. Chart dangerous rock with a least depth of 18.425 ft at present survey location in Latitude 41°26'07.223"N, Longitude 070°29'27.854"W.

2.4) Profile/Beam - 195/86 from h11346 / 1014_mb / 2004-227 / 506_1925

Survey Summary

Survey Position: 041° 26' 14.000" N, 70° 29' 24.521" W
Least Depth: 7.41 m
Timestamp: 2004-227.19:26:04.355 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 506_1925
Profile/Beam: 195/86
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over this position. No depth shoaler than the depth listed above was found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/506_1925	195/86	0.00	000.0	Primary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

24ft (13238_1, 13233_1, 13237_1)
 4fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)
 7.4m (5161_1)

S-57 Data

[None]

Office Notes

Concur with clarification. Delete the charted 11 ft shoal depth, 12 ft and 18 ft depth curves. Supersede present survey depths within the common area.

3 - UnCharted Features

3.1) Profile/Beam - 622/6 from h11346 / 1005_mb / 2004-270 / 057_1323

Survey Summary

Survey Position: 041° 25' 24.840" N, 70° 27' 40.575" W
Least Depth: 3.82 m
Timestamp: 2004-270.13:24:14.283 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 057_1323
Profile/Beam: 622/6
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/057_1323	622/6	0.00	000.0	Primary
h11346/1014_200/2004-231/180_1608	0002	2.04	024.1	Secondary
h11346/1014_200/2004-231/180_1608	0004	2.04	024.1	Secondary
h11346/1005_100/2004-227/181_1242	0002	3.25	039.1	Secondary
h11346/1005_100/2004-227/181_1242	0001	38.69	197.3	Secondary
h11346/1005_mb/2004-270/058_1325	240/8	43.81	198.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.824 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review indicates this feature as a rock with a significant height of 1.0m above the seafloor. Chart a dangerous rock with a least depth of 12.545 ft at present survey location in Latitude 41°25'24.840"N, Longitude 070°27'40.575"W.

3.2) Profile/Beam - 411/234 from h11346 / 1014_mb / 2004-270 / 297_1350

Survey Summary

Survey Position: 041° 25' 16.525" N, 70° 29' 32.928" W
Least Depth: 3.53 m
Timestamp: 2004-270.13:51:32.497 (09/26/2004)
Survey Line: h11346 / 1014_mb / 2004-270 / 297_1350
Profile/Beam: 411/234
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-270/297_1350	411/234	0.00	000.0	Primary
h11346/1014_mb/2004-270/297_1350	410/232	0.90	357.3	Secondary (grouped)
h11346/1014_200/2004-231/180b1651	0004	1.86	174.4	Secondary
h11346/1014_200/2004-231/180b1651	0010	1.86	174.4	Secondary
h11346/1005_200/2004-243/202_1836	0001	2.96	194.7	Secondary
h11346/1005_100/2004-227/181_1312	0003	3.24	173.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

11ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.532 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified this feature as a submerged rock. Chart a dangerous rock with a least depth of 11-ft (11.673-ft) at the present survey location in Latitude 41°25'16.525"N, Longitude 070°29'32.931"W.

3.3) Profile/Beam - 600/239 from h11346 / 1014_mb / 2004-227 / 451_1731

Survey Summary

Survey Position: 041° 25' 46.423" N, 70° 29' 43.349" W
Least Depth: 2.88 m
Timestamp: 2004-227.17:33:03.199 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 451_1731
Profile/Beam: 600/239
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/451_1731	600/239	0.00	000.0	Primary
h11346/1014_200/2004-231/240_1820	0011	1.23	056.5	Secondary
h11346/1014_200/2004-231/240_1820	0021	1.23	056.5	Secondary
h11346/1005_100/2004-227/181_1401	0001	3.38	130.5	Secondary
h11346/1005_100/2004-229/139_1932	0008	4.94	031.0	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

9ft (13238_1, 13233_1, 13237_1)

1 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

2.9m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 2.879 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified this feature as a submerged rock. Chart a dangerous rock with a least depth of 9.45-ft at the present survey location in Latitude 41°25'46.423"N, Longitude 070°29'43.349"W.

3.4) Profile/Beam - 136/89 from h11346 / 1005_mb / 2004-271 / 721_1313

Survey Summary

Survey Position: 041° 25' 04.516" N, 70° 30' 24.055" W
Least Depth: 3.28 m
Timestamp: 2004-271.13:13:21.918 (09/27/2004)
Survey Line: h11346 / 1005_mb / 2004-271 / 721_1313
Profile/Beam: 136/89
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.
 Final depth with approved water levels = 10.76-ft (3.28m).

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-271/721_1313	136/89	0.00	000.0	Primary
h11346/1005_200/2004-231/082_1856	0001	4.76	242.8	Secondary
h11346/1014_200/2004-231/180b1653	0001	4.83	008.0	Secondary
h11346/1005_200/2004-243/101_1907	0001	4.83	218.0	Secondary
h11346/1005_100/2004-227/181_1402	0001	5.63	035.1	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

11ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.3m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.280 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified this feature as a submerged rock. Chart a dangerous rock with a least depth of 11 feet at the present survey location in Latitude 41°25'04.516"N, Longitude 070°30'24.055"W.

3.5) Profile/Beam - 155/95 from h11346 / 1005_mb / 2004-270 / 018_1416

Survey Summary

Survey Position: 041° 26' 29.964" N, 70° 26' 04.204" W
Least Depth: 5.47 m
Timestamp: 2004-270.14:16:56.634 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 018_1416
Profile/Beam: 155/95
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/018_1416	155/95	0.00	000.0	Primary
h11346/1005_100/2004-229/082_1613	0001	2.67	166.1	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

18ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.4m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 5.471 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified this feature as a submerged rock with a least depth of 17.94-ft. Chart a dangerous rock with a least depth of 18-ft at the survey location in Latitude 41°26'29.964"N, Longitude 070°26'04.204"W.

3.6 Profile/Beam - 623/97 from h11346 / 1005_mb / 2004-270 / 172_1743

Survey Summary

Survey Position: 041° 26' 09.425" N, 70° 29' 58.410" W
Least Depth: 5.96 m
Timestamp: 2004-270.17:44:35.359 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 172_1743
Profile/Beam: 623/97
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.
 Office review designated data point; data point was previously rejected.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/172_1743	623/97	0.00	000.0	Primary
h11346/1005_100/2004-229/135_2011	0001	4.03	353.1	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.9m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.958 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified this feature as a submerged rock with atleast depth of 19.547-ft (9.958m). Chart a dangerous 19-ft rock at the survey location in Latitude 41°26'09.425"N, Longitude 070°29'58.410"W.

3.7) Profile/Beam - 493/79 from h11346 / 1005_mb / 2004-270 / 190_1809

Survey Summary

Survey Position: 041° 25' 59.483" N, 70° 30' 01.715" W
Least Depth: 5.39 m
Timestamp: 2004-270.18:10:22.463 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 190_1809
Profile/Beam: 493/79
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/190_1809	493/79	0.00	000.0	Primary
h11346/1014_200/2004-231/235_1744	0001	4.64	176.0	Secondary
h11346/1014_200/2004-231/235_1744	0003	4.64	176.0	Secondary
h11346/1005_100/2004-229/135_2011	0002	5.53	359.0	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.4m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.390 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review indentified a Rock with a least depth of 17.680-ft. Chart a dangerous 17-ft rock in Latitude 41°25'59.483"N, Longitude 070°30'01.715"W.

3.8) Profile/Beam - 667/82 from h11346 / 1014_mb / 2004-227 / 483_1844

Survey Summary

Survey Position: 041° 26' 01.887" N, 70° 29' 44.750" W
Least Depth: 4.57 m
Timestamp: 2004-227.18:46:48.682 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 483_1844
Profile/Beam: 667/82
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position. Rock present in a rocky area with a nearby 8 rk charted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/483_1844	667/82	0.00	000.0	Primary
h11346/1005_100/2004-229/138_1940	0004	4.12	172.7	Secondary
h11346/1014_mb/2004-227/481_1840	224/75	55.95	331.0	Secondary (grouped)

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

15ft (13238_1, 13233_1, 13237_1)

2 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

4.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 4.574 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review indentified a submerged rock with a least depth of 15.01-ft (4.574m). Chart a dangerous 15-ft rock in Latitude 41°26'01.887"N, Longitude 070°29'44.750"W.

3.9) Profile/Beam - 275/1 from h11346 / 1005_mb / 2004-270 / 152_1622

Survey Summary

Survey Position: 041° 26' 16.328" N, 70° 29' 13.801" W
Least Depth: 6.63 m
Timestamp: 2004-270.16:23:10.558 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 152_1622
Profile/Beam: 275/1
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/152_1622	275/1	0.00	000.0	Primary
h11346/1014_200/2004-231/244_1847	0017	3.78	224.3	Secondary
h11346/1005_100/2004-229/142_2124	0001	5.53	022.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

22ft (13238_1, 13233_1, 13237_1)

3 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.633 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified a submerged Rk with a least depth of 21.761-ft. Chart 22-ft dangerous rock in Latitude 41°26'16.328"N, Longitude 070°29'13.801"W.

3.10) Profile/Beam - 260/6 from h11346 / 1005_mb / 2004-270 / 116_1234

Survey Summary

Survey Position: 041° 23' 44.442" N, 70° 29' 12.664" W
Least Depth: 9.71 m
Timestamp: 2004-270.12:34:22.192 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 116_1234
Profile/Beam: 260/6
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a wreck was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/116_1234	260/6	0.00	000.0	Primary
h11346/1005_100/2004-229/157_1403	0001	4.13	059.7	Secondary
h11346/1014_200/2004-230/258_1635	0001	4.91	073.6	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

32ft (13238_1, 13233_1, 13237_1)

5 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

9.7m (5161_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 CONVIS - 2:not visual conspicuous
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 9.710 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart a 32-ft dangerous Wreck at survey location in Latitude 41°23'44.442"N, Longitude 070°29'12.664"W.

3.11) Profile/Beam - 179/64 from h11346 / 1005_mb / 2004-270 / 046_1352

Survey Summary

Survey Position: 041° 25' 49.940" N, 70° 27' 47.704" W
Least Depth: 9.23 m
Timestamp: 2004-270.13:52:39.840 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 046_1352
Profile/Beam: 179/64
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/046_1352	179/64	0.00	000.0	Primary
h11346/1014_200/2004-230/265_1345	0001	5.89	353.5	Secondary
h11346/1005_100/2004-229/164_1731	0001	8.77	194.4	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

30ft (13238_1, 13233_1, 13237_1)

5fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

9.2m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 9.233 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified a submerged Rk with a least depth 30.291-ft. Chart 30-ft dangerous Rk at survey location in Latitude 41°25'49.940"N, Longitude 070°27'47.704"N.

3.12) Profile/Beam - 326/54 from h11346 / 1005_mb / 2004-270 / 043_1303

Survey Summary

Survey Position: 041° 25' 54.602" N, 70° 27' 54.107" W
Least Depth: 11.14 m
Timestamp: 2004-270.13:03:38.179 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 043_1303
Profile/Beam: 326/54
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the contact and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/043_1303	326/54	0.00	000.0	Primary
h11346/1014_200/2004-229/261_2146	0001	3.30	049.2	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

36ft (13238_1, 13233_1, 13237_1)

6fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

11.1m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 11.137 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Office review identified a submerged Rk with a least depth 36.539-ft. Chart 36-ft dangerous rock at survey location in Latitude 41°25'54.602"N, Longitude 070°27'54.107"W.

4 - Office Review

4.1) Profile/Beam - 207/7 from h11346 / 1005_mb / 2004-270 / 396_1920

Survey Summary

Survey Position: 041° 24' 58.111" N, 70° 32' 24.411" W
Least Depth: 7.06 m
Timestamp: 2004-270.19:20:22.543 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 396_1920
Profile/Beam: 207/7
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/396_1920	207/7	0.00	000.0	Primary
h11346/1005_100/2004-227/113_1634	0001	4.48	185.4	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

23ft (13238_1, 13233_1, 13237_1)

3 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

7.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 7.059 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

During office review this sounding was determined to be a rock with a significant height of 0.75m; Least Depth = 23.159-ft. Chart a dangerous rock with a least depth of 23-ft at the survey location in Latitude 41°24'58.111"N, Longitude 070°32'24.411"W.

4.2) Profile/Beam - 165/35 from h11346 / 1005_mb / 2004-270 / 383_1903

Survey Summary

Survey Position: 041° 25' 57.731" N, 70° 32' 52.394" W
Least Depth: 4.30 m
Timestamp: 2004-270.19:04:12.517 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 383_1903
Profile/Beam: 165/35
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/383_1903	165/35	0.00	000.0	Primary
h11346/1005_100/2004-227/103_1451	0002	5.55	213.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

14ft (13238_1, 13233_1, 13237_1)

2 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

4.3m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 4.305 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Upon office review this sounding was determined to be a rock with a significant height of 0.8m in a rocky area; Least Depth = 14.12-ft. Chart a dangerous rock with a least depth of 14-ft at the survey location in Latitude 41°24'58.111"N, Longitude 070°32'24.411"W.

4.3) Profile/Beam - 196/75 from h11346 / 1005_mb / 2004-270 / 369_1859

Survey Summary

Survey Position: 041° 26' 06.696" N, 70° 32' 42.366" W
Least Depth: 5.06 m
Timestamp: 2004-270.18:59:56.399 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 369_1859
Profile/Beam: 196/75
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/369_1859	196/75	0.00	000.0	Primary
h11346/1005_100/2004-227/104_1456	0001	5.36	020.5	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

16ft (13238_1, 13233_1, 13237_1)

2 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.059 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. During office review a rock was identified at this location with a least depth of 16.597-ft. Chart a 16-ft dangerous rock in Latitude 41°26'06.696"N, Longitude 070°32'42.366"W.

4.4) Profile/Beam - 199/24 from h11346 / 1005_mb / 2004-270 / 380_1858

Survey Summary

Survey Position: 041° 26' 09.745" N, 70° 32' 40.660" W
Least Depth: 5.12 m
Timestamp: 2004-270.18:58:31.805 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 380_1858
Profile/Beam: 199/24
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/380_1858	199/24	0.00	000.0	Primary
h11346/1005_100/2004-227/104_1456	0003	5.26	016.8	Secondary
h11346/1005_100/2004-227/104_1456	0004	5.26	016.8	Secondary
h11346/1005_100/2004-227/104_1456	0005	5.26	016.8	Secondary
h11346/1005_100/2004-227/104_1456	0006	5.26	016.8	Secondary
h11346/1005_100/2004-227/104_1456	0007	5.26	016.8	Secondary
h11346/1005_100/2004-227/104_1456	0002	5.37	016.8	Secondary

Hydrographer Recommendations

Chart as per digital data.

Cartographically-Rounded Depth (Affected Charts):

17ft (13238_1, 13233_1, 13237_1)

2 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.1m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.116 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Upon office review a submerged rock was identified with a least depth of 16.784-ft. Chart a 17-ft dangerous rock in Latitude 41°26'09.745"N, Longitude 070°32'40.660"W.

4.5) Profile/Beam - 1102/25 from h11346 / 1005_mb / 2004-270 / 375_1826

Survey Summary

Survey Position: 041° 26' 19.501" N, 70° 31' 49.349" W
Least Depth: 6.71 m
Timestamp: 2004-270.18:28:03.084 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 375_1826
Profile/Beam: 1102/25
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/375_1826	1102/25	0.00	000.0	Primary
h11346/1005_100/2004-227/113_1635	0002	4.32	210.0	Secondary
h11346/1005_100/2004-227/112_1619	0001	4.62	041.5	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

22ft (13238_1, 13233_1, 13237_1)

3 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.714 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock at this location. Chart a dangerous rock with a least depth of 22-ft at the surveyed location in Latitude 41°26'19.501"N, Longitude 070°31'49.349"W.

4.6) Profile/Beam - 195/42 from h11346 / 1005_mb / 2004-270 / 379_1824

Survey Summary

Survey Position: 041° 26' 22.350" N, 70° 31' 23.819" W
Least Depth: 8.51 m
Timestamp: 2004-270.18:24:40.249 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 379_1824
Profile/Beam: 195/42
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/379_1824	195/42	0.00	000.0	Primary
h11346/1005_100/2004-227/117_1734	0001	3.10	234.4	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

28ft (13238_1, 13233_1, 13237_1)

4 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

8.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 8.505 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a height of 1.1 meters above the seafloor. Chart a rock with a least depth of 28-ft at the surveyed location in Latitude 41°26'22.350"N, Longitude 070°31'23.819"W.

4.7) Profile/Beam - 251/28 from h11346 / 1005_mb / 2004-270 / 074_1448

Survey Summary

Survey Position: 041° 25' 41.065" N, 70° 26' 58.899" W
Least Depth: 3.44 m
Timestamp: 2004-270.14:49:04.403 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 074_1448
Profile/Beam: 251/28
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/074_1448	251/28	0.00	000.0	Primary
h11346/1014_200/2004-230/274_1513	0001	1.35	074.4	Secondary
h11346/1005_200/2004-243/101_2006	0001	4.08	275.6	Secondary
h11346/1005_100/2004-227/181_1241	0002	5.82	096.5	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

11ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.4m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.439 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with significant height of 1.3m above the seafloor. Chart a dangerous rock with a least depth of 11-ft in Latitude 41°25'41.065"N, Longitude 070°26'58.899".

4.8) Profile/Beam - 149/57 from h11346 / 1005_mb / 2004-270 / 059_1337

Survey Summary

Survey Position: 041° 25' 28.927" N, 70° 27' 45.455" W
Least Depth: 4.36 m
Timestamp: 2004-270.13:38:00.139 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 059_1337
Profile/Beam: 149/57
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/059_1337	149/57	0.00	000.0	Primary
h11346/1005_100/2004-229/166_1721	0001	2.41	018.4	Secondary
h11346/1014_200/2004-230/267_1405	0001	3.71	012.5	Secondary
h11346/1005_100/2004-227/181_1242	0003	4.81	154.4	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

14ft (13238_1, 13233_1, 13237_1)

2 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

4.3m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 4.355 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.17m above the seafloor. Chart a dangerous rock with a least depth of 14-ft in Latitude 41°25'28.927"N, Longitude 070°27'45.455"W.

4.9) Profile/Beam - 191/191 from h11346 / 1014_mb / 2004-270 / 295_1342

Survey Summary

Survey Position: 041° 25' 11.176" N, 70° 29' 32.105" W
Least Depth: 3.68 m
Timestamp: 2004-270.13:43:12.561 (09/26/2004)
Survey Line: h11346 / 1014_mb / 2004-270 / 295_1342
Profile/Beam: 191/191
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-270/295_1342	191/191	0.00	000.0	Primary
h11346/1005_100/2004-227/181_1312	0002	2.39	176.9	Secondary
h11346/1014_200/2004-231/180b1651	0002	2.90	164.0	Secondary
h11346/1014_200/2004-231/180b1651	0008	2.90	164.0	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.678 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified rock elevated 1.10m above the seafloor. Chart a dangerous rock with a least depth of 12-ft in Latitude 41°25'11.176"N, Longitude 070°29'32.105"W.

4.10) Profile/Beam - 311/221 from h11346 / 1014_mb / 2004-270 / 300_1405

Survey Summary

Survey Position: 041° 25' 22.130" N, 70° 29' 34.716" W
Least Depth: 3.63 m
Timestamp: 2004-270.14:06:03.522 (09/26/2004)
Survey Line: h11346 / 1014_mb / 2004-270 / 300_1405
Profile/Beam: 311/221
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

200% SSS and 100% MBES was acquired over the area and a sounding was found in this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-270/300_1405	311/221	0.00	000.0	Primary
h11346/1014_200/2004-231/180b1651	0006	3.20	181.1	Secondary
h11346/1014_200/2004-231/180b1651	0011	3.20	181.1	Secondary
h11346/1005_100/2004-227/181_1312	0004	45.13	319.4	Secondary
h11346/1014_mb/2004-270/297_1350	596/59	47.10	320.3	Secondary
h11346/1014_200/2004-231/180b1651	0005	58.27	053.2	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.625 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.11m above the seafloor with a least depth of 11.893-ft. Chart a dangerous rock with a least depth of 12-ft in Latitude.

4.11) Profile/Beam - 1493/93 from h11346 / 1005_mb / 2004-243 / 235_1614

Survey Summary

Survey Position: 041° 25' 25.489" N, 70° 29' 35.958" W
Least Depth: 3.85 m
Timestamp: 2004-243.16:16:53.513 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 235_1614
Profile/Beam: 1493/93
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/235_1614	1493/93	0.00	000.0	Primary
h11346/1005_100/2004-227/181_1312	0007	3.19	135.0	Secondary
h11346/1014_200/2004-231/180b1651	0007	3.37	111.2	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.848 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.85m above the seafloor. Chart a dangerous rock with a least depth of 12-ft in Latitude 41°25'25.489"N, Longitude 070°29'35.958"W.

4.12) Profile/Beam - 782/25 from h11346 / 1005_mb / 2004-243 / 235_1614

Survey Summary

Survey Position: 041° 25' 16.799" N, 70° 29' 36.363" W
Least Depth: 3.59 m
Timestamp: 2004-243.16:15:48.583 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 235_1614
Profile/Beam: 782/25
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/235_1614	782/25	0.00	000.0	Primary
h11346/1014_200/2004-231/180b1651	0003	2.46	189.1	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.593 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.85m above the seafloor. Chart a dangerous rock with a least depth of 12-ft in Latitude 41°25'16.799"N, Longitude 070°29'36.363"W.

4.13) Profile/Beam - 132/31 from h11346 / 1005_mb / 2004-271 / 714_1310

Survey Summary

Survey Position: 041° 25' 04.786" N, 70° 30' 41.585" W
Least Depth: 6.58 m
Timestamp: 2004-271.13:10:49.522 (09/27/2004)
Survey Line: h11346 / 1005_mb / 2004-271 / 714_1310
Profile/Beam: 132/31
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-271/714_1310	132/31	0.00	000.0	Primary
h11346/1005_100/2004-229/131_2055	0001	3.24	196.1	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

21ft (13238_1, 13233_1, 13237_1)

3 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.580 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.60m above the seafloor, with a least depth of 21.59-ft. Chart a dangerous rock with a least depth of 21-ft in Latitude 41°25'04.786"N, Longitude 070°30'41.585"W.

4.14) Profile/Beam - 730/99 from h11346 / 1005_mb / 2004-270 / 170_1745

Survey Summary

Survey Position: 041° 26' 09.742" N, 70° 29' 49.503" W
Least Depth: 6.02 m
Timestamp: 2004-270.17:46:36.168 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 170_1745
Profile/Beam: 730/99
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/170_1745	730/99	0.00	000.0	Primary
h11346/1005_100/2004-229/136_2003	0002	1.00	154.5	Secondary
h11346/1014_200/2004-231/237_1759	0003	5.41	226.7	Secondary
h11346/1014_200/2004-231/237_1759	0008	5.41	226.7	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.017 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.84m above the seafloor, with a least depth of 19.74-ft. Chart a dangerous rock with a least depth of 19-ft in Latitude 41°26'09.742"N, Longitude 070°29'49.503"W.

4.15) Profile/Beam - 195/27 from h11346 / 1005_mb / 2004-270 / 402_1742

Survey Summary

Survey Position: 041° 26' 04.261" N, 70° 29' 46.374" W
Least Depth: 5.66 m
Timestamp: 2004-270.17:42:23.012 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 402_1742
Profile/Beam: 195/27
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/402_1742	195/27	0.00	000.0	Primary
h11346/1014_200/2004-231/238_1805	0008	3.87	013.6	Secondary
h11346/1014_200/2004-231/238_1805	0027	3.87	013.6	Secondary
h11346/1005_100/2004-229/137_1949	0002	4.87	039.9	Secondary
h11346/1014_200/2004-231/238_1805	0009	38.47	348.6	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

18ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.657 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.72m above the seafloor, with a least depth of 18.56-ft. Chart a dangerous rock with a least depth of 18-ft in Latitude 41°26'04.261"N, Longitude 070°29'46.374"W.

4.16) Profile/Beam - 793/240 from h11346 / 1014_mb / 2004-227 / 467_1812

Survey Summary

Survey Position: 041° 25' 55.920" N, 70° 29' 47.377" W
Least Depth: 2.63 m
Timestamp: 2004-227.18:15:06.772 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 467_1812
Profile/Beam: 793/240
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/467_1812	793/240	0.00	000.0	Primary
h11346/1014_200/2004-231/238_1805	0017	4.66	060.5	Secondary
h11346/1014_200/2004-231/238_1805	0032	4.66	060.5	Secondary
h11346/1005_100/2004-229/138_1940	0001	7.69	197.9	Secondary
h11346/1014_200/2004-231/238_1805	0016	43.59	114.5	Secondary
h11346/1014_200/2004-231/238_1805	0033	43.59	114.5	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

8ft (13238_1, 13233_1, 13237_1)

1 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

2.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 2.632 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated greater than 1.70m above the seafloor, with a least depth of 8.64-ft. Chart a dangerous rock with a least depth of 8-ft in Latitude 41°25'55.920"N, Longitude 070°29'47.377"W.

4.17) Profile/Beam - 194/83 from h11346 / 1005_mb / 2004-270 / 143_1607

Survey Summary

Survey Position: 041° 26' 31.620" N, 70° 29' 13.930" W
Least Depth: 7.21 m
Timestamp: 2004-270.16:07:49.166 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 143_1607
Profile/Beam: 194/83
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/143_1607	194/83	0.00	000.0	Primary
h11346/1005_100/2004-229/141_1904	0001	4.77	018.2	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

23ft (13238_1, 13233_1, 13237_1)

4fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

7.2m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 7.215 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Retain the dangerous 23-ft Rk as currently charted.

4.18) Profile/Beam - 22/80 from h11346 / 1014_mb / 2004-227 / 491_1858

Survey Summary

Survey Position: 041° 26' 04.998" N, 70° 29' 24.066" W
Least Depth: 5.71 m
Timestamp: 2004-227.18:58:20.748 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 491_1858
Profile/Beam: 22/80
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/491_1858	22/80	0.00	000.0	Primary
h11346/1014_200/2004-231/243_1838	0005	4.02	015.3	Secondary
h11346/1014_200/2004-231/243_1838	0042	4.02	015.3	Secondary
h11346/1014_mb/2004-227/491_1858	43/234	22.33	148.5	Secondary (grouped)
h11346/1005_mb/2004-270/184_1644	650/58	24.94	005.4	Secondary
h11346/1014_200/2004-231/243_1838	0006	28.30	003.2	Secondary
h11346/1014_200/2004-231/243_1838	0027	28.30	003.2	Secondary
h11346/1005_100/2004-229/141_1909	0001	28.46	142.5	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

18ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 5.708 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Office review identified a dangerous rock with a least depth 18.73-ft. Chart a dangerous 18-ft Rk in Latitude 41°26'04.998"N, Longitude 070°29'24.066"W.

4.19) Profile/Beam - 104/1 from h11346 / 1014_mb / 2004-227 / 487_1851

Survey Summary

Survey Position: 041° 25' 55.071" N, 70° 29' 27.842" W
Least Depth: 4.56 m
Timestamp: 2004-227.18:51:24.145 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 487_1851
Profile/Beam: 104/1
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/487_1851	104/1	0.00	000.0	Primary
h11346/1005_100/2004-229/141_1909	0011	2.82	038.8	Secondary
h11346/1014_200/2004-231/243_1838	0010	5.08	010.3	Secondary
h11346/1014_200/2004-231/243_1838	0032	5.08	010.3	Secondary
h11346/1014_mb/2004-227/487_1851	80/24	22.50	299.2	Secondary (grouped)
h11346/1005_100/2004-229/141_1909	0005	22.91	316.7	Secondary
h11346/1005_100/2004-229/141_1909	0006	22.91	316.7	Secondary
h11346/1014_200/2004-231/243_1838	0013	34.49	150.3	Secondary
h11346/1014_200/2004-231/243_1838	0030	34.49	150.3	Secondary
h11346/1005_100/2004-229/141_1909	0007	36.05	148.5	Secondary
h11346/1005_mb/2004-270/403_1714	761/18	38.18	154.5	Secondary
h11346/1014_200/2004-231/243_1838	0012	38.98	104.0	Secondary
h11346/1014_200/2004-231/243_1838	0033	38.98	104.0	Secondary
h11346/1005_mb/2004-243/254_1341	1417/79	41.31	110.2	Secondary
h11346/1005_100/2004-229/141_1909	0004	41.76	105.1	Secondary
h11346/1005_100/2004-229/141_1909	0008	82.39	114.8	Secondary (grouped)
h11346/1005_100/2004-229/141_1909	0009	82.93	134.3	Secondary (grouped)
h11346/1005_mb/2004-243/254_1341	1286/77	83.95	118.4	Secondary (grouped)
h11346/1014_mb/2004-227/306_1308	3137/45	85.41	136.0	Secondary (grouped)
h11346/1014_200/2004-231/241_1831	0004	88.87	141.2	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

15ft (13238_1, 13233_1, 13237_1)

2 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

4.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 4.558 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.5m above the seafloor with a least depth of 14.95-ft. Chart a 15-ft dangerous rock in Latitude 41°25'55.071"N, Longitude 070°29'27.842"W.

4.20) Profile/Beam - 482/96 from h11346 / 1005_mb / 2004-270 / 403_1714

Survey Summary

Survey Position: 041° 25' 54.411" N, 70° 29' 23.472" W
Least Depth: 5.04 m
Timestamp: 2004-270.17:15:31.515 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 403_1714
Profile/Beam: 482/96
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Rock present in both MB and SSS.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/403_1714	482/96	0.00	000.0	Primary
h11346/1005_100/2004-229/143_2140	0001	0.54	162.8	Secondary
h11346/1005_mb/2004-270/127_1653	1242/81	0.88	169.6	Secondary
h11346/1005_100/2004-229/143_2140	0002	2.90	021.1	Secondary
h11346/1014_200/2004-231/244_1847	0004	4.37	227.3	Secondary
h11346/1014_200/2004-231/244_1847	0012	4.37	227.3	Secondary
h11346/1005_100/2004-229/142_2124	0007	5.47	021.8	Secondary

Hydrographer Recommendations

Chart a rock with a least depth of 16 ft. (*office review - Rock has a height of nearly 2 m*)

Cartographically-Rounded Depth (Affected Charts):

16ft (13238_1, 13233_1, 13237_1)

2 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.037 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart a dangerous 16-ft Rock located in Latitude 41°25'54.411"N, Longitude 070°29'23.472"W.

4.21) Profile/Beam - 1253/60 from h11346 / 1005_mb / 2004-243 / 257_1357

Survey Summary

Survey Position: 041° 25' 54.393" N, 70° 29' 32.780" W
Least Depth: 3.66 m
Timestamp: 2004-243.13:59:18.907 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 257_1357
Profile/Beam: 1253/60
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/257_1357	1253/60	0.00	000.0	Primary
h11346/1014_200/2004-231/241_1831	0011	5.82	209.8	Secondary
h11346/1014_mb/2004-227/481_1840	670/33	31.56	261.1	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 3.658 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with least depth of 12.007-ft elevated 1.13m above the seafloor. Chart a dangerous 12-ft rock in Latitude 41°25'54.393"N, Longitude 070°29'32.780"W.

4.22) Profile/Beam - 868/17 from h11346 / 1005_mb / 2004-270 / 156_1625

Survey Summary

Survey Position: 041° 26' 08.212" N, 70° 29' 20.547" W
Least Depth: 5.91 m
Timestamp: 2004-270.16:26:21.715 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 156_1625
Profile/Beam: 868/17
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/156_1625	868/17	0.00	000.0	Primary
h11346/1005_100/2004-229/142_2124	0005	4.22	012.3	Secondary
h11346/1014_200/2004-231/243_1838	0004	5.83	031.9	Secondary
h11346/1014_200/2004-231/243_1838	0026	5.83	031.9	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.9m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.905 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 19.37-ft, elevated 1.08m above the seafloor. Chart a 19-ft dangerous rock in Latitude 41°26'08.212"N, Longitude 070°29'20.547"W.

4.23) Profile/Beam - 719/5 from h11346 / 1005_mb / 2004-270 / 156_1625

Survey Summary

Survey Position: 041° 26' 09.681" N, 70° 29' 18.183" W
Least Depth: 5.77 m
Timestamp: 2004-270.16:26:08.088 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 156_1625
Profile/Beam: 719/5
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/156_1625	719/5	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 5.771 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a 18.93-ft least depth on a rock elevated approximately 1.25m above the seafloor. Chart a 19-ft dangerous rock in Latitude 41°26'09.681"N, Longitude 070°29'18.183"W.

4.24) Profile/Beam - 122/9 from h11346 / 1005_mb / 2004-270 / 067_1350

Survey Summary

Survey Position: 041° 25' 39.357" N, 70° 27' 38.010" W
Least Depth: 6.20 m
Timestamp: 2004-270.13:50:34.651 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 067_1350
Profile/Beam: 122/9
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/067_1350	122/9	0.00	000.0	Primary
h11346/1014_200/2004-230/267_1404	0001	0.50	273.8	Secondary

Hydrographer Recommendations

Cartographically-Rounded Depth (Affected Charts):

20ft (13238_1, 13233_1, 13237_1)

3 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.2m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.199 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with 20.34-ft least depth that is elevated 0.98m above the seafloor. Chart a 20-ft dangerous rock in Latitude 41°25'39.357"N, Longitude 070°27'38.010"W.

4.25) Profile/Beam - 941/235 from h11346 / 1014_mb / 2004-227 / 441_1702

Survey Summary

Survey Position: 041° 25' 42.607" N, 70° 29' 45.544" W
Least Depth: 2.84 m
Timestamp: 2004-227.17:05:38.264 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 441_1702
Profile/Beam: 941/235
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/441_1702	941/235	0.00	000.0	Primary
h11346/1014_200/2004-231/180b1652	0005	1.58	142.7	Secondary
h11346/1014_200/2004-231/180b1652	0010	1.58	142.7	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

9ft (13238_1, 13233_1, 13237_1)

1 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

2.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 2.838 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.16m above the seafloor. Chart a 9-ft dangerous rock in Latitude 41°25'42.607"N, Longitude 070°29'45.544"N.

4.26) Profile/Beam - 192/66 from h11346 / 1005_mb / 2004-270 / 068b1315

Survey Summary

Survey Position: 041° 25' 38.182" N, 70° 27' 31.622" W
Least Depth: 5.51 m
Timestamp: 2004-270.13:15:35.998 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 068b1315
Profile/Beam: 192/66
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/068b1315	192/66	0.00	000.0	Primary
h11346/1005_100/2004-229/168_1707	0002	3.58	217.0	Secondary
h11346/1014_200/2004-230/269_1424	0001	3.81	354.0	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

18ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.513 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 18.09-ft (5.513m) elevated 0.87m above the seafloor. Chart an 18-ft dangerous rock in Latitude 41°25'38.182"N, Longitude 070°27'31.622"W.

4.27) Profile/Beam - 658/26 from h11346 / 1005_mb / 2004-243 / 236_1611

Survey Summary

Survey Position: 041° 25' 20.884" N, 70° 29' 36.731" W
Least Depth: 3.79 m
Timestamp: 2004-243.16:12:08.599 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 236_1611
Profile/Beam: 658/26
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/236_1611	658/26	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 3.795 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 12.45-ft (3.79m) elevated 0.83m above the seafloor. Chart a 12-ft dangerous rock in Latitude 41°25'20.884"N, Longitude 070°29'36.731"W.

4.28) Profile/Beam - 135/148 from h11346 / 1014_mb / 2004-227 / 461_1756

Survey Summary

Survey Position: 041° 25' 57.087" N, 70° 29' 55.688" W
Least Depth: 5.02 m
Timestamp: 2004-227.17:57:18.282 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 461_1756
Profile/Beam: 135/148
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/461_1756	135/148	0.00	000.0	Primary
h11346/1014_200/2004-231/237_1759	0002	4.28	216.0	Secondary
h11346/1014_200/2004-231/237_1759	0007	4.28	216.0	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

16ft (13238_1, 13233_1, 13237_1)

2 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 5.023 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 16.48-ft (5.02m) elevated 0.87m above the seafloor. Chart an 16-ft dangerous rock in Latitude 41°25'57.087"N, Longitude 070°29'55.688"W.

4.29) Profile/Beam - 911/155 from h11346 / 1014_mb / 2004-227 / 461_1756

Survey Summary

Survey Position: 041° 25' 45.831" N, 70° 29' 33.052" W
Least Depth: 3.26 m
Timestamp: 2004-227.17:59:53.194 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 461_1756
Profile/Beam: 911/155
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

rock present by multibeam, in a rocky area

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/461_1756	911/155	0.00	000.0	Primary
h11346/1014_200/2004-231/243_1838	0016	4.31	347.6	Secondary

Hydrographer Recommendations

chart representative soundings in the common area

Cartographically-Rounded Depth (Affected Charts):

10ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.2m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 3.256 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 10.68-ft (3.26m) elevated approximately 0.85m above the seafloor. Chart a 10-ft dangerous rock in Latitude 41°25'45.831"N, Longitude 070°29'33.052"W.

4.30) Profile/Beam - 100/12 from h11346 / 1005_mb / 2004-270 / 159_1632

Survey Summary

Survey Position: 041° 26' 11.540" N, 70° 29' 06.648" W
Least Depth: 6.72 m
Timestamp: 2004-270.16:32:19.706 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 159_1632
Profile/Beam: 100/12
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/159_1632	100/12	0.00	000.0	Primary
h11346/1005_100/2004-230/144_1603	0001	3.34	051.6	Secondary
h11346/1005_100/2004-230/144_1603	0006	4.26	030.3	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

22ft (13238_1, 13233_1, 13237_1)

3 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.716 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.92m above the seafloor with a least depth of 22.034-ft (6.716m). Chart a dangerous 22-ft rock in Latitude 41°26'11.540"N, Longitude 070°29'06.648"W.

4.31) Profile/Beam - 227/32 from h11346 / 1005_mb / 2004-243 / 255_1346

Survey Summary

Survey Position: 041° 25' 48.529" N, 70° 29' 17.121" W
Least Depth: 6.40 m
Timestamp: 2004-243.13:46:49.722 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 255_1346
Profile/Beam: 227/32
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/255_1346	227/32	0.00	000.0	Primary
h11346/1014_200/2004-229/245_2114	0008	2.67	197.2	Secondary
h11346/1005_100/2004-230/144_1603	0004	4.84	015.8	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

21ft (13238_1, 13233_1, 13237_1)

3 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.4m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.397 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated above the seafloor 1.02m with a least depth of 20.987-ft (6.397m). Chart a dangerous 21-ft rock in Latitude 41°25'48.529"N, Longitude 070°29'17.121"W.

4.32) Profile/Beam - 2248/62 from h11346 / 1005_mb / 2004-243 / 255_1346

Survey Summary

Survey Position: 041° 25' 58.527" N, 70° 29' 37.362" W
Least Depth: 3.96 m
Timestamp: 2004-243.13:49:54.268 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 255_1346
Profile/Beam: 2248/62
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/255_1346	2248/62	0.00	000.0	Primary
h11346/1014_200/2004-231/240_1820	0004	4.28	003.1	Secondary
h11346/1014_200/2004-231/240_1820	0015	4.28	003.1	Secondary
h11346/1014_200/2004-231/240_1820	0003	35.19	275.3	Secondary
h11346/1014_200/2004-231/240_1820	0014	35.19	275.3	Secondary
h11346/1014_mb/2004-227/485_1847	431/36	35.80	270.3	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

13ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.9m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes: QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 3.958 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.03m above the seafloor with a least depth of 12.985-ft (3.958m). Chart a dangerous 13-ft rock in Latitude 41°25'58.527"N, Longitude 070°29'37.362"W.

4.33) Profile/Beam - 310/25 from h11346 / 1014_mb / 2004-227 / 455_1741

Survey Summary

Survey Position: 041° 25' 42.962" N, 70° 29' 33.046" W
Least Depth: 3.47 m
Timestamp: 2004-227.17:42:54.278 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 455_1741
Profile/Beam: 310/25
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/455_1741	310/25	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

11ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.4m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 3.471 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.93m above the seafloor with a least depth of 11.388-ft (3.471m). Chart a dangerous 11-ft rock in Latitude 41°25'42.962"N, Longitude 070°29'33.046"W.

4.34) Profile/Beam - 244/83 from h11346 / 1014_mb / 2004-227 / 492_1900

Survey Summary

Survey Position: 041° 26' 07.223" N, 70° 29' 27.854" W
Least Depth: 5.62 m
Timestamp: 2004-227.19:01:33.100 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 492_1900
Profile/Beam: 244/83
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/492_1900	244/83	0.00	000.0	Primary
h11346/1014_200/2004-231/241_1831	0006	6.61	236.5	Secondary
h11346/1014_200/2004-231/241_1831	0013	6.61	236.5	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

18ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.6m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.616 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.07m above the seafloor. Chart dangerous rock with a least depth of 18-ft (18.425-ft)at present survey location in Latitude 41°26'07.223"N, Longitude 070°29'27.854"W.

4.35) Profile/Beam - 1649/15 from h11346 / 1005_mb / 2004-243 / 262_1419

Survey Summary

Survey Position: 041° 25' 49.267" N, 70° 29' 31.156" W
Least Depth: 3.52 m
Timestamp: 2004-243.14:22:05.533 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 262_1419
Profile/Beam: 1649/15
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/262_1419	1649/15	0.00	000.0	Primary
h11346/1014_200/2004-231/243_1838	0014	4.87	356.9	Secondary
h11346/1014_200/2004-231/243_1838	0035	4.87	356.9	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

11ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.519 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.0m above the seafloor with a least depth of 11.545-ft (3.519m). Chart a dangerous 11-ft rock in Latitude 41°25'49.267"N, Longitude 070°29'31.156"W.

4.36) Profile/Beam - 233/92 from h11346 / 1005_mb / 2004-270 / 186_1749

Survey Summary

Survey Position: 041° 26' 11.242" N, 70° 30' 06.474" W
Least Depth: 6.02 m
Timestamp: 2004-270.17:49:55.789 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 186_1749
Profile/Beam: 233/92
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

During office review - 19 ft. rock present among 24 foot surrounding depths.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/186_1749	233/92	0.00	000.0	Primary
h11346/1005_200/2004-231/232_1833	0001	3.61	016.9	Secondary
h11346/1005_200/2004-231/231_1816	0001	5.03	192.1	Secondary
h11346/1005_mb/2004-270/189_1755	176/101	44.09	269.0	Secondary

Hydrographer Recommendations

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

6.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 6.019 m
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.51m above the seafloor with a least depth of 19.747-ft (6.019m). Chart a dangerous 19-ft rock in Latitude 41°26'11.242"N, Longitude 070°30'06.474"W.

4.37) Profile/Beam - 1047/100 from h11346 / 1005_mb / 2004-270 / 405_1712

Survey Summary

Survey Position: 041° 25' 51.549" N, 70° 29' 18.031" W
Least Depth: 5.52 m
Timestamp: 2004-270.17:13:38.095 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 405_1712
Profile/Beam: 1047/100
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

During office review - Definite rock present in MB and SSS

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/405_1712	1047/100	0.00	000.0	Primary
h11346/1005_100/2004-230/144_1603	0003	3.59	356.3	Secondary

Hydrographer Recommendations

Cartographically-Rounded Depth (Affected Charts):

18ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.5m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.520 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.99m above the seafloor with a least depth of 18.11-ft (5.520m). Chart a dangerous 18-ft rock in Latitude 41°25'51.549"N, Longitude 070°29'18.031"W.

4.38) Profile/Beam - 50/165 from h11346 / 1014_mb / 2004-227 / 302_1548

Survey Summary

Survey Position: 041° 25' 18.377" N, 70° 30' 14.707" W
Least Depth: 3.77 m
Timestamp: 2004-227.15:48:37.449 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 302_1548
Profile/Beam: 50/165
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

During office review - Rock present in MB, possibly present in SSS (on curve so is hard to make out)

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/302_1548	50/165	0.00	000.0	Primary

Hydrographer Recommendations

Cartographically-Rounded Depth (Affected Charts):

12ft (13238_1, 13233_1, 13237_1)

2fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.773 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 12.378-ft (3.773m). Chart a dangerous 12-ft rock in Latitude 41°25'18.377"N, Longitude 070°30'14.707"W.

4.39) Profile/Beam - 358/35 from h11346 / 1014_mb / 2004-270 / 317_1524

Survey Summary

Survey Position: 041° 25' 31.608" N, 70° 29' 36.975" W
Least Depth: 3.49 m
Timestamp: 2004-270.15:26:08.414 (09/26/2004)
Survey Line: h11346 / 1014_mb / 2004-270 / 317_1524
Profile/Beam: 358/35
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-270/317_1524	358/35	0.00	000.0	Primary

Hydrographer Recommendations

Cartographically-Rounded Depth (Affected Charts):

11ft (13238_1, 13233_1, 13237_1)

1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.5m (5161_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)
Attributes: EXPSOU - 2:shoaler than range of depth of the surrounding depth area
 QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VERDAT - 12:Mean lower low water

Office Notes

Natural shoal identified during office processing, least depth of 11.453-ft (3.491m). Supersede charted depths with survey soundings within the common area. Chart 11-ft sounding in Latitude 41°25'31.608"N, Longitude 070°29'36.975"W.

4.40) Profile/Beam - 370/126 from h11346 / 1014_mb / 2004-271 / 217_1356

Survey Summary

Survey Position: 041° 25' 32.427" N, 70° 30' 08.316" W
Least Depth: 3.16 m
Timestamp: 2004-271.13:58:12.212 (09/27/2004)
Survey Line: h11346 / 1014_mb / 2004-271 / 217_1356
Profile/Beam: 370/126
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

During office review - rock present in MB

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-271/217_1356	370/126	0.00	000.0	Primary

Hydrographer Recommendations

Cartographically-Rounded Depth (Affected Charts):

10ft (13238_1, 13233_1, 13237_1)
 1 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)
 3.1m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 3:found by multi-beam
 VALSOU - 3.161 m
 VERDAT - 12:Mean lower low water
 WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 10.370-ft (3.161m). Chart a dangerous 10-ft rock in Latitude 41°25'32.427"N, Longitude 070°30'08.316"W.

4.41) Profile/Beam - 70/13 from h11346 / 1014_mb / 2004-227 / 465_1807

Survey Summary

Survey Position: 041° 25' 59.426" N, 70° 29' 55.867" W
Least Depth: 5.15 m
Timestamp: 2004-227.18:07:46.329 (08/14/2004)
Survey Line: h11346 / 1014_mb / 2004-227 / 465_1807
Profile/Beam: 70/13
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-227/465_1807	70/13	0.00	000.0	Primary
h11346/1005_mb/2004-270/190_1809	172/8	1.57	198.0	Secondary
h11346/1014_200/2004-231/236_1753	0001	4.20	028.6	Secondary
h11346/1005_100/2004-229/136_2003	0001	4.88	197.6	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

17ft (13238_1, 13233_1, 13237_1)

2 ¾fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.1m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 5.152 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 0.95m above the seafloor with a least depth of 16.902-ft (5.152m). Chart a dangerous 17-ft rock in Latitude 41°25'59.426"N, Longitude 070°29'55.867"W.

4.42) Profile/Beam - 457/6 from h11346 / 1005_mb / 2004-270 / 173_1738

Survey Summary

Survey Position: 041° 26' 08.052" N, 70° 29' 42.971" W
Least Depth: 5.80 m
Timestamp: 2004-270.17:39:31.235 (09/26/2004)
Survey Line: h11346 / 1005_mb / 2004-270 / 173_1738
Profile/Beam: 457/6
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-270/173_1738	457/6	0.00	000.0	Primary
h11346/1014_200/2004-231/238_1805	0005	4.83	043.8	Secondary
h11346/1014_200/2004-231/238_1805	0023	4.83	043.8	Secondary
h11346/1014_200/2004-231/238_1805	0006	21.44	251.2	Secondary
h11346/1014_200/2004-231/238_1805	0025	21.44	251.2	Secondary
h11346/1014_200/2004-231/238_1805	0004	32.33	275.8	Secondary
h11346/1014_200/2004-231/238_1805	0024	32.33	275.8	Secondary
h11346/1005_100/2004-229/138_1940	0007	33.96	265.9	Secondary
h11346/1005_mb/2004-270/174_1737	24/77	34.38	269.4	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.8m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 5.801 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.02m above the seafloor with a least depth of 19.032-ft (5.801m). Chart a dangerous 19-ft rock in Latitude 41°26'08.052"N, Longitude 070°29'42.971"W.

4.43) Profile/Beam - 1013/10 from h11346 / 1014_mb / 2004-270 / 266_1733

Survey Summary

Survey Position: 041° 25' 28.457" N, 70° 29' 48.856" W
Least Depth: 2.98 m
Timestamp: 2004-270.17:36:35.646 (09/26/2004)
Survey Line: h11346 / 1014_mb / 2004-270 / 266_1733
Profile/Beam: 1013/10
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1014_mb/2004-270/266_1733	1013/10	0.00	000.0	Primary
h11346/1014_mb/2004-270/265_1737	84/39	2.96	153.4	Secondary
h11346/1014_200/2004-231/180b1652	0002	3.58	157.1	Secondary
h11346/1014_200/2004-231/180b1652	0007	3.58	157.1	Secondary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

10ft (13238_1, 13233_1, 13237_1)

1 ½fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

3.0m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
 STATUS - 1:permanent
 TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 2.982 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock elevated 1.06m above the seafloor with a least depth of 9.783-ft (2.982m). Chart a dangerous 10-ft rock in Latitude 41°25'28.457"N, Longitude 070°29'48.856"W.

4.44) Profile/Beam - 274/85 from h11346 / 1005_mb / 2004-243 / 261_1414

Survey Summary

Survey Position: 041° 25' 45.880" N, 70° 29' 21.956" W
Least Depth: 5.77 m
Timestamp: 2004-243.14:14:39.528 (08/30/2004)
Survey Line: h11346 / 1005_mb / 2004-243 / 261_1414
Profile/Beam: 274/85
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-243/261_1414	274/85	0.00	000.0	Primary
h11346/1005_100/2004-230/143_1616	0004	2.46	158.4	Secondary
h11346/1005_100/2004-230/144_1603	0005	42.90	225.5	Secondary
h11346/1005_mb/2004-243/259_1405	218/67	46.42	222.3	Secondary
h11346/1014_200/2004-229/245_2114	0006	48.10	225.1	Secondary (grouped)
h11346/1005_100/2004-230/143_1616	0003	50.12	219.9	Secondary (grouped)
h11346/1005_mb/2004-243/259_1405	131/48	57.74	257.1	Secondary (grouped)
h11346/1005_mb/2004-243/257_1357	280/12	67.31	213.8	Secondary (grouped)
h11346/1014_200/2004-229/245_2114	0007	68.23	215.6	Secondary (grouped)

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.7m (5161_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)
Attributes: QUASOU - 6:least depth known
STATUS - 1:permanent
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 5.766 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Office review identified a rock with a least depth of 5.766m (18.91-ft). Chart a dangerous 19-ft rock in Latitude 41°25'45.880"N, Longitude 070°29'21.956"W.

1 - Detached Positions

Registry Number: H11346
State: Massachusetts
Locality: South Coast of Massachusetts
Sub-locality: Edgartown Harbor
Project Number: S-B904-TJ-04
Survey Date: 08/18/2004

Charts Affected

Number	Version	Date	Scale
13238	14th Ed.	09/27/1997	1:20000
13233	16th Ed.	04/14/2001	1:40000
13237	39th Ed.	05/01/2003	1:80000
12300	44th Ed.	07/01/2004	1:400000
13200	33rd Ed.	01/19/2002	1:400000
13009	30th Ed.	08/01/2002	1:500000
13006	31st Ed.	06/01/2003	1:675000
5161	13th Ed.	10/01/2003	1:1058400
13003	47th Ed.	06/01/2003	1:1200000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude
1.1	DP G "7" C	Green buoy	[None]	41.39597667° N	70.48295650° W
1.2	DP R "8" N	Red buoy	[None]	41.38973933° N	70.49792217° W
1.3	DP R "6" LT	Red buoy, lighted	[None]	41.40745067° N	70.48733917° W
1.4	DP G "3" C	Green buoy	[None]	41.42303550° N	70.47201667° W
1.5	DP R "4" N	Red buoy	[None]	41.42195933° N	70.48826117° W
1.6	DP R "2" Bell	Red buoy, lighted	[None]	41.43804867° N	70.48957483° W

1.1) Profile/Beam - 2/1 from B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP

Survey Summary

Survey Position: 41.39597667° N, 70.48295650° W
Least Depth: [None]
Timestamp: 2004-231.12:30:04.000 (08/18/2004)
DP Dataset: B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP
Profile/Beam: 2/1
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Buoy G C "7" is within 50 meters of charted position.

Hydrographer Recommendations

Retain as charted. *Concur.*

S-57 Data

[None]

1.2) Profile/Beam - 3/1 from B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP

Survey Summary

Survey Position: 41.38973933° N, 70.49792217° W
Least Depth: [None]
Timestamp: 2004-231.12:46:31.000 (08/18/2004)
DP Dataset: B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP
Profile/Beam: 3/1
Charts Affected: 13238_4, 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Buoy R N "8" is within 50 meters of charted position.

Hydrographer Recommendations

Retain as charted. *Concur.*

S-57 Data

[None]

1.3) Profile/Beam - 4/1 from B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP

Survey Summary

Survey Position: 41.40745067° N, 70.48733917° W
Least Depth: [None]
Timestamp: 2004-231.12:59:05.000 (08/18/2004)
DP Dataset: B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP
Profile/Beam: 4/1
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Buoy R "6" is within 50 meters of charted position.

Hydrographer Recommendations

Retain as charted. *Concur.*

S-57 Data

[None]

1.4) Profile/Beam - 5/1 from B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP

Survey Summary

Survey Position: 41.42303550° N, 70.47201667° W
Least Depth: [None]
Timestamp: 2004-231.13:07:25.000 (08/18/2004)
DP Dataset: B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP
Profile/Beam: 5/1
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Buoy G C "3" is within 50 meters of charted position.

Hydrographer Recommendations

Retain as charted. *Concur.*

S-57 Data

[None]

1.5) Profile/Beam - 6/1 from B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP

Survey Summary

Survey Position: 41.42195933° N, 70.48826117° W
Least Depth: [None]
Timestamp: 2004-231.13:21:05.000 (08/18/2004)
DP Dataset: B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP
Profile/Beam: 6/1
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Buoy R N "4" is within 50 meters of charted position.

Hydrographer Recommendations

Retain as charted. *Concur.*

S-57 Data

[None]

1.6) Profile/Beam - 7/1 from B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP

Survey Summary

Survey Position: 41.43804867° N, 70.48957483° W
Least Depth: [None]
Timestamp: 2004-231.13:30:39.000 (08/18/2004)
DP Dataset: B904_TJ_04_H11346E / 1005_DP / 2004-227 / H11346_1005_231DP
Profile/Beam: 7/1
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Buoy R "2" is within 50 meters of charted position.

Hydrographer Recommendations

Retain as charted. *Concur.*

S-57 Data

[None]



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: March 1, 2005

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: S-B904-TJ-2004
HYDROGRAPHIC SHEET: H11346

LOCALITY: Edgartown Harbor, MA

TIME PERIOD: August 14 - August 30, 2004
September 26 - September 27, 2004

TIDE STATION USED: 844-8558 Edgartown, MA
Lat. $41^{\circ} 23.3'N$ Lon. $70^{\circ} 30.7'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.719 meters

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: SCM116, SCM117, SCM122, SCM122A,
SCM123 & SCM130

Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the new 1983-2001 National Tidal Datum Epoch (NTDE).

Thomas V. New 3/8/05

CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION



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ATLANTIC HYDROGRAPHIC BRANCH EVALUATION REPORT FOR H11346 (2004)

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

B. DATA ACQUISITION AND PROCESSING

B.1 EQUIPMENT

The following software was used to process and review data at the Atlantic Hydrographic Branch (AHB):

- CARIS HIPS/SIPS version 6.0 service pack 1
- CARIS BASE Editor 1.0
- CARIS HOM 3.3 service pack 3
- PYDRO, version 6.4.9
- dKart Inspector 5.0 build 707

B.2 PROCESSING

Chart compilation was done by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

H-Cells

Three H-cells were created, the first covering the entire survey area for chart 13238_1 (KAPP 2102) at a 1:20,000 chart scale. Chart 13238 has a 1:10,000 scale inset covering Edgartown Harbor (KAPP 2105) embedded in the H11346 Base Cell file (US511346_CU.000). Base Cell file US511346_SS.00) was created at survey scale of 1:10,000. These files were exported as *.000 files from CARIS HOM as per current Hydrographic Survey Technical Directive.

Attributes:

Inform: H11346, S-B904-TJ-04, NOAA Ship Thomas Jefferson, CDR Emily B. Christman

SorDat: 20040927

SorInd: US,US,HNS,H11346 (or US,US,graph,13238 for seabed area)

Office processing began using CARIS BASE Editor, but after experiencing difficulties CARIS Field Sheet Editor was used to create the preliminary contours for this survey, which were then finalized by hand. In CARIS HIPS a 3m combined finalized BASE

surface was created from the 0.5m field-generated BASE surfaces at 1:10000 scale. Survey scale sounding data set was extracted from the multibeam and singlebeam data at 5mm @ 1:10000 scale.

Seabed classified areas (seafloor descriptors or characteristics) were transferred to the H-cell from the raster chart. Bottom samples that were classified as seabed area with the acronym NATSUR (nature of surface, IE - mud, sand, rock) are visible in the H-cell as an S-57 object. However, those seafloor descriptions that were classified seabed area with the acronym NATQUA (nature of surface – qualifying terms, IE – hard, soft, sticky) are NOT visible in the H-cell as a separate S-57 object, thus you do not know where an area is classified hard, etc. in the H-cell.

Contour and Depth Area Feature Objects

Charted curve values, listed below, were specified in a metric depth contour list of standard feet curve-equivalents found in OCS H-Cell Specifications 1.1. Upon completion of H-Cell compilation, and prior to conversion to chart units, false values replace the generalized metric values, such that, upon conversion, standard NOAA chart equivalents will result, as indicated below.

H-Cell Depth Contours		(standard metric curve values)	(NOAA chart contour values)
Depth Curve	Created at:	(m =*.75 ft)	(m =*.0 ft)
0	0.75	0.229	0.000
6	6.75	2.057	1.829
12	12.75	3.886	3.658
18	18.75	5.715	5.486
30	30.75	9.373	9.144
60	60.75	18.517	18.288
120	120.75	36.805	36.576

These values are the metric equivalent of the standard NOAA chart contour values. The 120 ft depth curve was only used as a deep closing curve value to define depth areas, there is no 120 ft. contour on the chart or in the ENC.

Before the HOM file was exported to S-57 format, the file was converted from metric to NOAA chart values. This conversion renames the DRVAL1 and DRVAL2 attributes (for

depth areas) and VALDCO attributes (for the contours) from the metric equivalent values to the standard NOAA chart contour values to accommodate NOAA traditional rounding standards on charts. This renaming convention assures all soundings fall on the shoal side of the properly charted contour.

Soundings during HOM processing were selected with the CARIS GIS Environmental Variable set to a metric scale (-1,-1,T) to accommodate millimeter precision of the sounding value. This environmental variable was reset to NOAA standard charting values (0,0,N) to convert the metric sounding values to whole feet.

The completed H-Cell was exported as a Base Cell File (ENC.000) in S-57 format with all values in metric units. The metric equivalent ENC.000 file was then converted to NOAA chart values (ENC_CU.000) with all values measured in feet.

dKart Inspector

The final ENC_CU.000 file was examined using dKart Inspector. Warnings received were all inconsequential. The DSPM.HUNI and DSPM.DUNI were reported to have illegal values, but these errors were expected as originating during ENC conversion to NOAA chart values, so they also can be ignored. The seabed areas brought forward from the chart caused inconsistent qualifier warnings in dKart, noting inconsistent qualifiers between natsur and natqua. This was expected as fourteen seabed areas were created with a natsur of unknown, while the other warnings come from the 4 instances of fine mud. Also, 117 instances of soundings deeper than their enclosing depth area were noted.

C. VERTICAL AND HORIZONTAL CONTROL

Office processing of this survey as an ENC required translating the datum to meet S-57 ENC requirements. During CARIS HOM processing the horizontal geodetic datum was translated from the survey datum (NAD83, UTM Zone 19) to Latitude and Longitude (LLDG) World Geodetic System-84 (WGS-84) prior to exporting the HOM file to the S-57 format. The S-57 ENC format serves as the exchange file submitted to the Marine Chart Division.

Final tides were received at AHB in March, 2005 and reapplied to the survey during office processing.

D. RESULTS AND RECOMMENDATIONS

D.1. CHART COMPARISONS

13238 14th Ed., Sept. 27/97

HYDROGRAPHY

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in Section D. of the Descriptive Report. The following should be noted:

DANGERS TO NAVIGATION (DTONS)

Three Dangers to Navigation were submitted by the field. One Danger to Navigation (Dton) Report was identified during office processing and submitted to the Marine Chart Division, N/CS3x1, Silver Spring, Maryland. A copy is appended to this report. The following should be noted:

CHARTED AND UNCHARTED FEATURES

1) A charted dangerous 32 rock in the vicinity of 40°26'31.62"N Latitude, 70°29'13.93"W Longitude was not reviewed by the hydrographer. Upon office review the dangerous 32 rock was confirmed in this location. It is recommended this feature be retained as charted.

2) A charted dangerous 23 rock in the vicinity of 41° 26' 31.62" N Latitude, 70° 29' 13.93" W Longitude was not reviewed by the hydrographer. Upon office review the dangerous 23 rock was confirmed in this location. It is recommended this feature be retained as charted.

3) During office processing 42 uncharted rocks were identified across the survey area. It is recommended a rock with the appropriate least depth be charted in the following locations:

	<u>Latitude</u>	<u>Longitude</u>	<u>Least Depth (ft)</u>
1)	41° 24' 58.111" N	70° 32' 24.411" W	23
2)	41° 25' 57.731" N	70° 32' 52.394" W	14
3)	41° 26' 06.696" N	70° 32' 42.366" W	16
4)	41° 26' 09.745" N	70° 32' 40.660" W	17
5)	41° 26' 19.501" N	70° 31' 49.349" W	22
6)	41° 26' 22.350" N	70° 31' 23.819" W	28
7)	41° 25' 41.065" N	70° 26' 58.899" W	11
8)	41° 25' 28.927" N	70° 27' 45.455" W	14
9)	41° 25' 11.176" N	70° 29' 32.105" W	12

	<u>Latitude</u>	<u>Longitude</u>	<u>Least Depth (ft)</u>
10)	41° 25' 22.130" N	70° 29' 34.716" W	12
11)	41° 25' 25.489" N	70° 29' 35.958" W	12
12)	41° 25' 16.799" N	70° 29' 36.363" W	12
13)	41° 25' 04.786" N	70° 30' 41.585" W	21
14)	41° 26' 09.742" N	70° 29' 49.503" W	19
15)	41° 26' 04.261" N	70° 29' 46.374" W	18
16)	41° 25' 55.920" N	70° 29' 47.377" W	8
17)	41° 26' 04.998" N	70° 29' 24.066" W	18
18)	41° 25' 55.071" N	70° 29' 27.842" W	15
19)	41° 25' 54.411" N	70° 29' 23.472" W	16
20)	41° 25' 54.393" N	70° 29' 32.780" W	12
21)	41° 26' 08.212" N	70° 29' 20.547" W	19
22)	41° 26' 09.681" N	70° 29' 18.183" W	19
23)	41° 25' 39.357" N	70° 27' 38.010" W	20
24)	41° 25' 42.607" N	70° 29' 45.544" W	9
25)	41° 25' 38.182" N	70° 27' 31.622" W	18
26)	41° 25' 20.884" N	70° 29' 36.731" W	12
27)	41° 25' 57.087" N	70° 29' 55.688" W	16
28)	41° 25' 45.831" N	70° 29' 33.052" W	10
29)	41° 26' 11.540" N	70° 29' 06.648" W	22
30)	41° 25' 48.529" N	70° 29' 17.121" W	21
31)	41° 25' 58.527" N	70° 29' 37.362" W	13
32)	41° 25' 42.962" N	70° 29' 33.046" W	11
33)	41° 26' 07.223" N	70° 29' 27.854" W	18
34)	41° 25' 49.267" N	70° 29' 31.156" W	11
35)	41° 26' 11.242" N	70° 30' 06.474" W	19
36)	41° 25' 51.549" N	70° 29' 18.031" W	18
37)	41° 25' 18.377" N	70° 30' 14.707" W	12
38)	41° 25' 32.427" N	70° 30' 08.316" W	10
39)	41° 25' 59.426" N	70° 29' 55.867" W	17
40)	41° 26' 08.052" N	70° 29' 42.971" W	19
41)	41° 25' 28.457" N	70° 29' 48.856" W	10
42)	41° 25' 45.880" N	70° 29' 21.956" W	19

Comparison with Prior Surveys

A comparison with prior surveys was not done during office processing in accordance with section 4. of the memorandum titled "Changes to Hydrographic Survey Processing", dated May 24, 1995.

Junctions

There were no surveys to junction with H11346.

Adequacy of Survey

Except as noted above, the present survey is adequate to supersede the charted hydrography within the common area. This is an adequate hydrographic/multibeam/side scan sonar survey. No additional field work is recommended.

Bryan Chauveau

Bryan Chauveau
Physical Scientist
Verification of Data
Evaluation and Analysis Report

H11346 AHB DtoN #1

Registry Number: H11346
State: Massachusetts
Locality: South Coast of Massachusetts
Sub-locality: Edgartown Harbor
Project Number: S-B904-TJ-04
Survey Date: 09/27/2004

The following Danger to Navigation was discovered during office review of survey H11346 - an unidentified Obstruction with a least depth of 19 feet in the channel approaching Edgartown Harbor, Martha's Vineyard Island, Long Island Sound.

Charts Affected

Number	Version	Date	Scale
13238	14th Ed.	09/27/1997	1:20000
13233	16th Ed.	04/14/2001	1:40000
13237	39th Ed.	05/01/2003	1:80000
12300	44th Ed.	07/01/2004	1:400000
13200	33rd Ed.	01/19/2002	1:400000
13009	30th Ed.	08/01/2002	1:500000
13006	31st Ed.	06/01/2003	1:675000
5161	13th Ed.	10/01/2003	1:1058400
13003	47th Ed.	06/01/2003	1:1200000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	1084/98	Obstruction	5.92 m	041° 23' 31.842" N	70° 29' 27.904" W	---

1.1) Profile/Beam - 1084/98 from h11346 / 1005_mb / 2004-271 / 044_1409

DANGER TO NAVIGATION

Survey Summary

Survey Position: 041° 23' 31.842" N, 70° 29' 27.904" W
Least Depth: 5.92 m
Timestamp: 2004-271.14:10:49.478 (09/27/2004)
Survey Line: h11346 / 1005_mb / 2004-271 / 044_1409
Profile/Beam: 1084/98
Charts Affected: 13238_1, 13233_1, 13237_1, 12300_1, 13200_1, 13009_1, 13006_1, 5161_1, 13003_1

Remarks:

Discovered during office processing in both MB and SSS, this obstruction is in the middle of the channel to the entrance of Edgartown Harbor. Feature item has a least depth of 19.43 feet. Surrounding depths are 33 feet, feature height is 4.4 meters off the seafloor.

It is recommended this feature be dived upon in order to identify this obstruction.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11346/1005_mb/2004-271/044_1409	1084/98	0.00	000.0	Primary

Hydrographer Recommendations

Chart a dangerous 19 foot Obstruction.

Cartographically-Rounded Depth (Affected Charts):

19ft (13238_1, 13233_1, 13237_1)

3 ¼fm (12300_1, 13200_1, 13009_1, 13006_1, 13003_1)

5.9m (5161_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

TECSOU - 2:found by side scan sonar; 3:found by multi-beam

VALSOU - 5.922 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Chart a dangerous 19 foot Obstruction.

APPROVAL SHEET

H1346

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disapproval of charted data. All revisions and additions made to the H-Cell files during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Bryan Chauveau
Bryan Chauveau
Physical Scientist,
Atlantic Hydrographic Branch

Date: 9/20/06

All final products have undergone a comprehensive review as per the Atlantic Hydrographic Branch Processing Manual and are verified to be accurate and complete except where noted in the Evaluation Report.

Castle Eugene Parker
Castle Eugene Parker
Physical Scientist,
Atlantic Hydrographic Branch

Date: 09/18/06

I have reviewed the Base Cell files, accompanying data, and reports. This survey and accompanying Marine Chart Division deliverables meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Approved:

T. Schattgen
Commander F. Tod Schattgen, NOAA
Chief, Atlantic Hydrographic Branch

Date:

9/26/06